

Cancer Disparities By Race in Virginia

Introduction

This fact sheet gives an overview of cancer disparities by race in Virginia. Due to limited numbers for other racial and ethnic groups, the focus is on cancer incidence, staging, mortality, risk factor, and screening statistics for African-American and White men and women.

All Sites Cancer

Overall African-Americans had a higher all sites cancer incidence rate than Whites due to an especially high rate in African-American males. African-American males had the highest rate of cancer incidence followed by White males. African-American females had the lowest rate of cancer incidence. African-Americans had a higher all sites cancer mortality rate than Whites. The cancer mortality rate was especially high in African-American males. African-American males and females had higher cancer mortality rates than White males and females, respectively. The percentage of cancers diagnosed local stage was lower in African-American women than in African-American males and White males and females. All sites cancer incidence, staging, and mortality data by race are shown in Table 1.

Table 1: All Sites Cancer Incidence, Staging, and Mortality Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | |
|------------------------|------------------------|------------------|---------------|----------------------|------------------------|------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI |
| All African-Americans | 31,629 | 482.3 | 476.9- 487.7 | 44% | 13,709 | 215.1 | 211.5 - 218.7 |
| African-American Men | 17,056 | 628.0 | 618.1 - 638.0 | 48% | 7,168 | 284.8 | 278.2 -291.4 |
| African-American Women | 14,573 | 384.8 | 378.1 - 391.2 | 40% | 6,541 | 173.0 | 168.8 - 177.2 |
| All Whites | 139,945 | 450.3 | 447.9 - 452.7 | 47% | 54,335 | 173.3 | 171.8 - 174.7 |
| White Men | 72,685 | 522.3 | 518.4 - 526.2 | 48% | 28,339 | 211.5 | 209.1 - 214.0 |
| White Women | 67,260 | 400.7 | 397.6 - 403.8 | 46% | 25,996 | 147.3 | 145.5 - 149.1 |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

Breast Cancer (Female)

The rate of breast cancer incidence did not appear to differ substantially between African-American and White females but the mortality rate was 48% higher in African-American women. The percentage of breast cancers diagnosed local stage was lower in African-American women than in White women. The prevalence of mammography screening was 81% in African-American and 78% in White women. Breast cancer incidence, staging, mortality, and screening data by race are shown in Table 2.

Table 2: Breast Cancer Incidence, Staging, Mortality, and Screening Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | | Screening ⁴ | |
|------------------------|------------------------|------------------|---------------|----------------------|------------------------|------------------|-------------|------------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI | Prevalence Mammography | 95% CI |
| African-American Women | 4,881 | 126.1 | 122.5 - 130.0 | 53% | 1,299 | 33.0 | 31.2 - 34.8 | 81.1% | 77.1% - 84.6% |
| White Women | 20,824 | 124.2 | 122.5 - 126.0 | 63% | 3,916 | 22.3 | 21.6 - 23.0 | 77.7% | 75.8% - 79.4% |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics); screening prevalence (Behavioral Risk Factor Surveillance System)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ Behavioral Risk Factor Surveillance System is a national telephone survey of adults 18+. Breast Cancer Screening = Percent of women age 40 years and older reporting having a mammogram in past two years. Based on 2008 and 2010 data (pooled). Percentages are population-weighted.

Cervical Cancer

Cervical cancer incidence rates (per 100,000) were 7.2 in African-American females and 6.4 in White females and the mortality rate was 89% higher in African-American females. The percentage of cervical cancers diagnosed local stage was lower in African-American women than in White women. The prevalence of cervical cancer screening was 87% in African-American women and 84% in White women. Cervical cancer incidence, staging, mortality, and screening data by race are shown in Table 3.

Table 3: Cervical Cancer Incidence, Staging, Mortality, and Screening Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | | Screening ⁴ | |
|------------------------|------------------------|------------------|-----------|----------------------|------------------------|------------------|-----------|------------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI | Prevalence Pap Test | 95% CI |
| African-American Women | 281 | 7.2 | 6.3 - 8.1 | 40% | 133 | 3.4 | 2.8 - 4.0 | 86.5% | 79.5% - 91.3% |
| White Women | 960 | 6.4 | 6.0 - 6.8 | 51% | 295 | 1.8 | 1.6 - 2.0 | 84.4% | 81.7% - 86.8% |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics); screening prevalence (Behavioral Risk Factor Surveillance System)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ Behavioral Risk Factor Surveillance System is a national telephone survey of adults 18+. Cervical Cancer Screening = Percentage of women age 18 years and older reporting having a Pap test in past three years. Women who had a hysterectomy are excluded. Based on 2008 and 2010 data (pooled). Percentages are population-weighted.

Colorectal Cancer

The rate of colorectal cancer incidence was about 28% higher in African-Americans compared to Whites. The colorectal cancer death rate was 48% greater in African-Americans compared to Whites. African-American males were at especially high risk of developing and dying from colorectal cancer. The prevalence of colorectal

cancer screening was 68% among African-Americans and 64% among Whites. Colorectal cancer incidence, staging, mortality, and screening data are shown in Table 4.

Table 4: Colorectal Cancer Incidence, Staging, Mortality, and Screening Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | | Screening ⁴ | |
|------------------------|------------------------|------------------|-------------|----------------------|------------------------|------------------|-------------|---------------------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI | Prevalence Colorectal Screening | 95% CI |
| All African-Americans | 3,356 | 52.7 | 50.9 - 54.5 | 39% | 1,409 | 22.2 | 21.0 - 23.4 | 68.4% | 63.9% - 72.6% |
| African-American Men | 1,667 | 62.9 | 59.8 - 66.2 | 38% | 721 | 28.0 | 26.0 - 30.0 | 65.0% | 56.6% - 72.6% |
| African-American Women | 1,689 | 45.6 | 43.4 - 47.8 | 39% | 688 | 18.4 | 17.0 - 19.8 | 70.8% | 66.0% - 75.3% |
| All Whites | 12,734 | 41.3 | 40.6 - 42.0 | 41% | 4,698 | 15.0 | 14.6 - 15.4 | 63.6% | 61.8% - 65.4% |
| White Men | 6,510 | 47.6 | 46.7 - 48.8 | 41% | 2,381 | 17.7 | 17.0 - 18.4 | 64.4% | 61.5% - 67.2% |
| White Women | 6,224 | 36.2 | 35.3 - 37.1 | 40% | 2,317 | 12.9 | 12.4 - 13.4 | 63.0% | 60.6% - 65.2% |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics); screening prevalence (Behavioral Risk Factor Surveillance System)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ Behavioral Risk Factor Surveillance System is a national telephone survey of adults 18+. Colorectal cancer screening = Percentage of adults 50 and older who had either a sigmoidoscopy/colonoscopy within the past 5 years and/or a home blood stool test within the past year. Based on 2008 and 2010 data (pooled). Percentages are population-weighted.

Lung and Bronchus Cancer

African-American and White males had higher rates of lung cancer than African-American and White females. African-American and White males also had higher lung cancer death rates than African-American and White females. Lung cancer incidence and mortality rates were especially high in African-American males. The percentage of lung cancers diagnosed local stage was lowest in African-American males and highest in White females. Smoking appeared to be more prevalent among African-American males than among White males or African-American or White females. Lung and bronchus cancer incidence, staging, mortality, and risk factor data are shown in Table 5.

Table 5: Lung and Bronchus Cancer Incidence, Staging, Mortality, and Risk Factor Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | | Risk Factor ⁴ | |
|------------------------|------------------------|------------------|--------------|----------------------|------------------------|------------------|-------------|----------------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI | Prevalence Current Smoking | 95% CI |
| All African-Americans | 4,456 | 71.1 | 69.0 - 73.2 | 15% | 3,519 | 55.5 | 53.6 - 57.3 | 18.3% | 15.3% - 21.8% |
| African-American Men | 2,620 | 103.2 | 99.1 - 107.5 | 14% | 2,097 | 82.8 | 79.2 - 86.3 | 22.9% | 17.2% - 29.7% |
| African-American Women | 1,836 | 50.0 | 47.7 - 52.3 | 17% | 1,422 | 38.0 | 36.0 - 40.0 | 14.9% | 12.1% - 18.3% |
| All Whites | 20,941 | 67.9 | 67.0 - 68.9 | 19% | 16,098 | 51.2 | 50.4 - 52.0 | 17.6% | 16.4% - 18.7% |
| White Men | 11,317 | 83.7 | 82.1 - 85.3 | 17% | 8,935 | 65.3 | 64.0 - 66.7 | 18.9% | 17.1% - 20.9% |
| White Women | 9,624 | 56.5 | 55.4 - 57.6 | 22% | 7,163 | 40.8 | 39.8 - 41.7 | 16.3% | 15.0% - 17.6% |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics); risk factor prevalence (Behavioral Risk Factor Surveillance System)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ Behavioral Risk Factor Surveillance System is a national telephone survey of adults 18+. Smoking=Percentage of adults who report currently smoking and have smoked at least 100 cigarettes in their lifetime. Based on 2008-2010 data (pooled). Percentages are population-weighted.

Melanoma

The incidence rate of melanoma was over twenty times greater in Whites compared to African-Americans, and was higher in White males compared to White females. The melanoma mortality rate was about seven times higher in Whites compared to African-Americans, and was more than double in White males compared to White females. About ¾ of melanomas in Whites were diagnosed local stage compared to fewer than half in African-Americans. Sunburn in the previous twelve months was much more prevalent in Whites compared to African-Americans, and was more prevalent in White males compared to White females. Melanoma incidence, staging, mortality, and risk factor data are shown in Table 6.

Table 6: Melanoma Incidence, Staging, Mortality, and Risk Factor Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | | Risk Factor ⁴ | |
|------------------------|------------------------|------------------|-------------|----------------------|------------------------|------------------|-----------|--------------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI | Prevalence Sunburn | 95% CI |
| All African-Americans | 70 | 1.1 | 0.9 - 1.4 | 46% | 31 | 0.5 | .03 - .06 | 4.5% | 2.6% - 7.6% |
| African-American Men | 27 | 1.1 | 0.7 - 1.7 | ~ | 13 | ~ | ~ | 6.2% | 2.7% - 13.7% |
| African-American Women | 43 | 1.2 | 0.8 - 1.6 | 51% | 18 | ~ | ~ | 3.2% | 1.8% - 5.7% |
| All Whites | 7,543 | 24.6 | 24.1 - 25.2 | 74% | 1,144 | 3.6 | 3.4 - 3.8 | 37.3% | 35.0% - 39.7% |
| White Men | 4,446 | 31.9 | 31.0 - 32.9 | 72% | 724 | 5.2 | 4.8 - 5.6 | 44.4% | 40.3% - 48.5% |
| White Women | 3,097 | 19.4 | 18.7 - 20.1 | 77% | 420 | 2.4 | 2.2 - 2.6 | 30.8% | 28.4% - 33.4% |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics); risk factor prevalence (Behavioral Risk Factor Surveillance System)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

~ Percent local stage is not reported if reflects a count greater than 0 and less than 11. Mortality rate is not reported if 25 or fewer cases.

⁴ Behavioral Risk Factor Surveillance System is a national telephone survey of adults 18+. Sunburn = Percentage of adults age 18 years and older reporting having a sunburn in the last 12 months. Based on 2007 data. Percentages are population-weighted.

Oral Cavity Cancer

The incidence rate was similar for African-American males (16.4 per 100,000) and White males (16.3 per 100,000) and was higher among White females (5.9 per 100,000) compared to African-American females (4.6 per 100,000). The mortality rate was higher in African-Americans compared to Whites due to an especially high death rate in African-American males. The mortality rate in African-American males was about 56% higher than that in White males. Both African-American and White males were much more likely to be diagnosed with and die from oral cancer than African-American and White females. The percentage of oral cancers diagnosed local stage was greater in Whites compared to African-Americans, for African-American females compared to African-American males, and for White females compared to White males. Oral cancer screening was much more as prevalent in Whites (48.1%) compared to African-Americans (31.6%). Both African-American and White males were much more likely to use smokeless tobacco than African-American and White females. Oral cavity cancer incidence, staging, mortality, risk factor, and screening data are shown in Table 7.

Table 7: Oral Cavity Cancer Incidence, Staging, Mortality, Risk Factor, and Screening Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | | Risk Factor and Screening ⁴ | | | |
|------------------------|------------------------|------------------|-------------|----------------------|------------------------|------------------|-----------|--|--------------|------------------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI | Prevalence Smokeless Tobacco | 95% CI | Prevalence Oral Cancer Check | 95% CI |
| All African-Americans | 681 | 9.7 | 9.0 - 10.5 | 22% | 211 | 3.1 | 2.7 - 3.5 | 3.3% | 1.1% - 9.2% | 31.6% | 27.0% - 36.7% |
| African-American Men | 503 | 16.4 | 14.9 - 17.9 | 20% | 154 | 5.3 | 4.5 - 6.1 | 6.8% | 2.1% - 20.0% | 36.8% | 28.5% - 46.1% |
| African-American Women | 178 | 4.6 | 4.0 - 5.3 | 26% | 57 | 1.5 | 1.1 - 1.8 | 0.6% | 0.3% - 1.2% | 28.3% | 23.2% - 33.9% |
| All Whites | 3,404 | 10.8 | 10.4 - 11.1 | 33% | 688 | 2.2 | 2.0 - 2.3 | 4.3% | 3.7% - 5.1% | 48.1% | 46.1% - 50.1% |
| White Men | 2,409 | 16.3 | 15.7 - 17.0 | 29% | 473 | 3.4 | 3.1 - 3.7 | 7.8% | 6.5% - 9.3% | 46.7% | 43.6% - 49.8% |
| White Women | 995 | 5.9 | 5.5 - 6.3 | 45% | 215 | 1.2 | 1.0 - 1.4 | 1.1% | 0.7% - 1.6% | 49.4% | 46.8% - 52.0% |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics); risk factor and screening prevalence (Behavioral Risk Factor Surveillance System)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ Behavioral Risk Factor Surveillance System is a national telephone survey of adults 18+.

Smokeless Tobacco Use = Percentage of adults age 18+ years reporting current use of smokeless tobacco. Based on 2009 and 2010 (combined) data. Percentages are population-weighted.

Oral Cancer Screening = Percentage of adults age 40+ years reporting an oral cancer check by a doctor/dentist within the past 12 months. Based on 2009 and 2010 (combined) data. Percentages are population-weighted.

Ovarian Cancer

White females were both more likely to be diagnosed with and to die from ovarian cancer compared to African-American females. The percentage of ovarian cancers diagnosed local stage was similarly low for both African-American and White females. Ovarian cancer incidence, staging, and mortality data by race are shown in Table 8.

Table 8: Ovarian Cancer Incidence, Staging, and Mortality Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | |
|------------------------|------------------------|------------------|-------------|----------------------|------------------------|------------------|-----------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI |
| African-American Women | 337 | 8.8 | 7.9 - 9.8 | 13% | 264 | 7.0 | 6.2 - 7.9 |
| White Women | 2,087 | 12.4 | 11.9 - 13.0 | 14% | 1,539 | 8.7 | 8.3 - 9.2 |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population..

Prostate Cancer

African-American males were over 70% more likely to be diagnosed with, and about 2.5 times more likely to die from, prostate cancer compared to White males. The percentage of prostate cancers diagnosed local stage and the prevalence of PSA screening were similar for African-American and White males. Prostate cancer incidence, staging, mortality, and screening data by race are shown in Table 9.

Table 9: Prostate Cancer Incidence, Staging, Mortality, and Screening Data By Race

| Race | Incidence ¹ | | | Staging ² | Mortality ³ | | | Screening ⁴ | |
|----------------------|------------------------|------------------|---------------|----------------------|------------------------|------------------|-------------|------------------------|---------------|
| | Count | Rate per 100,000 | 95% CI | Percent Local Stage | Count | Rate per 100,000 | 95% CI | Prevalence PSA Test | 95% CI |
| African-American Men | 6,700 | 243.2 | 237.1 - 249.3 | 79% | 1,048 | 50.7 | 47.6 - 53.8 | 57.7% | 50.5% - 64.6% |
| White Men | 20,569 | 142.0 | 140.0 - 144.0 | 79% | 2,371 | 20.2 | 19.4 - 21.0 | 57.5% | 54.7% - 60.2% |

Sources: Incidence and percent local staging (VA Cancer Registry); mortality (VDH Division of Health Statistics); screening prevalence (Behavioral Risk Factor Surveillance System)

¹ Based on combined 2005-2009 data. Rates are age-adjusted to the 2000 U.S. standard population.

² Based on combined 2005-2009 data. Percent of Local Stage cancers reported using the Summary Staging System.

³ Based on combined 2006-2010 data. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ Behavioral Risk Factor Surveillance System is a national telephone survey of adults 18+. Prostate Cancer Screening = Percentage of men age 40 years and older reporting having a PSA test in past two years. Based on data from 2008 and 2010 (pooled). Percentages are population-weighted.

